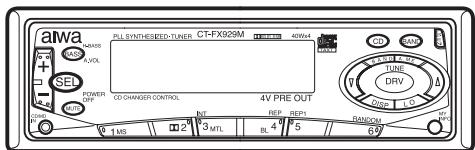


aiwa



CT-FR929M

MANUAL
SERVICE



STEREO CAR
CASSETTE RECEIVER

- BASIC TAPE MECHANISM: CDS-522AV
- TYPE: YZ

REVISION PUBLISHING

This Service Manual is the "Revision Publishing" and replaces "Simple Manual"
(S/M Code No. 09-993-408-5T1).

SPECIFICATIONS

<FM RADIO SECTION>

Frequency Range:	87.5 MHz to 108 MHz (50 kHz step)
Usable Sensitivity:	12.7 dBf
50 dB Quieting Sensitivity:	17.2 dBf
IF Rejection:	80 dB
Frequency Response:	30 Hz to 15,000 Hz
S/N Ratio:	63 dB
Stereo Separation:	35 dB at 1 kHz
Alternate Channel Selectivity:	70 dB
Capture Ratio:	3 dB

<AM RADIO SECTION>

<MW>

Frequency Range:	531 kHz to 1,602 kHz (9 kHz step)
Usable Sensitivity:	30 μ V (30 dB)

<LW>

Frequency Range:	144 kHz - 288 kHz (1 kHz/9 kHz steps)
Usable Sensitivity:	30 μ V (30 dB)

<TAPE SECTION>

Tape Speed:	4.8 cm/sec. (1 $\frac{7}{8}$ ips)
S/N Ratio (normal):	50 dB
S/N Ratio (metal) :	Dolby NR off 54 dB Dolby NR on 64 dB
Frequency Response (normal):	40 Hz - 14,000 Hz
	(metal): 40 Hz - 16,000 Hz
Stereo Separation:	40 dB
FF/REW Time:	95 sec. (C-60)

<AUDIO SECTION>

Max. Power Output:	40 W x 4 channels
CD/MD IN:	500 mV (10 k Ω)

<CD/MD IN input>

Input sensitivity (load impedance)	
CD/MD IN:	500 mV (10 k Ω)
Power-supply Voltage:	14.4V (11 to 16 V allowable), DC, negative ground
Load impedance:	4 Ω
Tone control:	Bass \pm 10 dB at 100 Hz Treble \pm 10 dB at 10 kHz
Pre-amp Output Voltage (load impedance):	2.2 V (10 k Ω)
Installation size:	182 x 53 x 155 mm (7 $\frac{1}{4}$ x 2 $\frac{1}{8}$ x 6 $\frac{1}{8}$ in.)

Design and specifications are subject to change without notice.
Dolby noise reduction manufactured under license from Dolby
Laboratories Licensing Corporation.

"DOLBY", and the double-D symbol  are trademarks of Dolby
Laboratories Licensing Corporation.

ACCESSORIES LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-KT1-901-010	IB,YZ(9L) FR929M		9	8Z-KT1-030-010	CASE,DFP -T	
1	8Z-KY1-904-010	IB,Y(3L,GIP CK) SW1-A		10	8Z-KT1-231-010	HLDR,HALF -T	
2	8Z-KT1-902-010	IB,INST,YZ (6L)FR929M		11	8Z-KT1-232-010	KEY,REMOVE -T	
2	8Z-KT1-903-010	IB,INST,YZ (CZ-PO-H)FR929M		12	8Z-KT1-251-010	S-SCREW,5*6 TH+ TAPPING ST	
3	86-KT1-237-010	HLDR,REAR MTG		13	88-KT1-250-010	S-SCREW,THIN HEAD+2.6-4 BLK	
4	87-B10-141-010	NUT,5 TYPE-2		14	88-KC4-053-010	HLDR,BELT HRC	
5	87-B10-143-010	UT1+5-15 W/O SLOT		15	88-KC4-057-010	BELT, HRC	
6	87-B10-144-010	W,5.2-10-0.5		16	88-KC4-254-010	PLATE,NUT M3	
7	87-B10-145-010	W-SPR,5.3-8.5-1.5		17	88-KC4-255-010	S-SCREW,HEX-SOC+3-3.5 BLK	
8	88-KT1-247-010	S-SCREW,HEXAGON		18	88-KC4-257-010	KEY,HEXAGON WRENCH	

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				C131	87-010-196-080		CHIP CAPACITOR,0.1-25
88-KT1-607-080	C-IC,SAA6579T			C132	87-010-198-080		CAP, CHIP 0.022
87-A20-233-010	C-IC,HA12192F			C133	87-016-459-040		CAP, E 470-10 SMG
88-KT1-604-010	IC,TA7291P			C141	87-010-498-040		CAP, E 10-16 GAS
82-KT1-622-010	C-IC,LC75374E			C142	87-010-498-040		CAP, E 10-16 GAS
87-A20-876-010	IC,HA13158			C143	87-010-182-080		C-CAP,S 2200P-50 B
88-KT1-606-080	IC,PST994D			C144	87-010-182-080		C-CAP,S 2200P-50 B
88-KTD-604-010	IC,BA09T			C147	87-010-494-040		CAP, E 1-50 GAS
87-A21-267-010	C-IC,UPD178018AGC-527-3B9			C148	87-010-494-040		CAP, E 1-50 GAS
87-002-689-080	IC,NJM2072M			C151	87-012-149-080		C-CAP,S 30P-50 CH
8Z-KT1-623-010	C-IC,UPD16432B			C152	87-010-315-080		C-CAP,S 27P-50 CH
87-A90-951-010	RCR UNIT,SBX1971-52			C153	87-010-495-040		CAP, E 2.2-50 GAS
				C154	87-012-157-080		C-CAP,S 330P-50 CH
				C155	87-010-175-080		CAP 560P
				C156	87-010-196-080		CHIP CAPACITOR,0.1-25
TRANSISTOR				C201	87-010-178-080		CHIP CAP 1000P
89-324-122-080	TR,2SC2412K(R)			C202	87-010-178-080		CHIP CAP 1000P
87-A30-289-040	C-TR,2SA1037AK(R)			C203	87-010-197-080		CAP, CHIP 0.01 DM
87-A30-288-040	C-TR,DTC114YKA			C204	87-010-197-080		CAP, CHIP 0.01 DM
87-A30-287-040	C-TR,DTC114TKA			C205	87-010-196-080		CHIP CAPACITOR,0.1-25
87-A30-293-010	TR,KTC2804(Y)			C206	87-010-196-080		CHIP CAPACITOR,0.1-25
87-A30-295-010	TR,KRA226M			C207	87-010-493-040		CAP, E 0.47-50
87-A30-283-040	C-TR,DTA114YKA			C208	87-010-493-040		CAP, E 0.47-50
87-A30-281-040	C-TR,DTC363TK			C209	87-010-196-080		CHIP CAPACITOR,0.1-25
87-A30-282-040	C-TR,DTA114TKA			C210	87-010-196-080		CHIP CAPACITOR,0.1-25
87-A30-290-010	TR,KTA1658(Y)			C211	87-010-494-040		CAP, E 1-50 GAS
87-A30-291-010	TR,KTC4369(Y)			C212	87-010-494-040		CAP, E 1-50 GAS
87-A30-292-010	TR,KTC3205(Y)			C221	87-010-492-040		CAP, E 0.33-50 GAS
87-A30-294-040	C-TR,DTB123YK			C222	87-010-197-080		CAP, CHIP 0.01 DM
				C223	87-010-197-080		CAP, CHIP 0.01 DM
DIODE				C224	87-010-494-040		CAP, E 1-50 GAS
87-020-331-080	CHIP-DIODE,DAN202K			C225	87-010-494-040		CAP, E 1-50 GAS
87-070-334-080	ZENER,MTZJ10B			C226	87-010-555-040		CAP, E 100-10 GAS
87-017-932-080	ZENER,MTZJ6.2B			C227	87-010-196-080		CHIP CAPACITOR,0.1-25
87-017-931-080	ZENER,MTZJ5.6B			C251	87-010-196-080		CHIP CAPACITOR,0.1-25
87-001-783-080	DIODE,1N4002			C252	87-A10-924-040		CAP, E 47-16 BP SME
87-A40-650-080	ZENER,MTZJ6.8A			C253	87-010-497-040		CAP, E 4.7-35 GAS
87-070-136-080	ZENER,MTZJ5.1B			C254	87-010-553-040		CAP, E 47-16 GAS
87-017-933-080	ZENER,MTZJ10D			C255	87-010-553-040		CAP, E 47-16 GAS
87-A40-624-080	ZENER,MTZJ10A			C301	87-010-498-040		CAP, E 10-16 GAS
87-A40-648-080	ZENER,MTZJ8.2A			C302	87-010-498-040		CAP, E 10-16 GAS
87-A40-654-010	DIODE,DSA17B			C303	87-010-494-040		CAP, E 1-50 GAS
87-020-585-080	CHIP-ZENER,02CZ6.2Y			C304	87-010-494-040		CAP, E 1-50 GAS
				C305	87-010-184-080		CHIP CAPACITOR 3300P(K)
				C306	87-010-184-080		CHIP CAPACITOR 3300P(K)
MAIN C.B				C307	87-010-198-080		CAP, CHIP 0.022
C101	87-010-178-080		CHIP CAP 1000P	C308	87-010-198-080		CAP, CHIP 0.022
C102	87-010-186-080		CAP, CHIP 4700P	C309	87-010-498-040		CAP, E 10-16 GAS
C103	87-010-490-040		CAP, ELECT 0.1-50	C310	87-010-498-040		CAP, E 10-16 GAS
C104	87-010-197-080		CAP, CHIP 0.01 DM	C311	87-A11-177-080		C-CAP,S 0.15-16 K B
C105	87-010-495-040		CAP, E 2.2-50 GAS	C312	87-A11-177-080		C-CAP,S 0.15-16 K B
C106	87-010-198-080		CAP, CHIP 0.022	C313	87-A11-177-080		C-CAP,S 0.15-16 K B
C107	87-010-552-040		CAP, E 22-16 GAS	C314	87-A11-177-080		C-CAP,S 0.15-16 K B
C108	87-010-322-080		C-CAP,S 100P-50 CH	C315	87-010-498-040		CAP, E 10-16 GAS
C109	87-010-553-040		CAP, E 47-16 GAS	C316	87-010-498-040		CAP, E 10-16 GAS
C110	87-010-553-040		CAP, E 47-16 GAS	C321	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-010-197-080		CAP, CHIP 0.01 DM	C322	87-010-555-040		CAP, E 100-10 GAS
C112	87-010-178-080		CHIP CAP 1000P	C323	87-010-196-080		CHIP CAPACITOR,0.1-25
C114	87-010-178-080		CHIP CAP 1000P	C324	87-010-498-040		CAP, E 10-16 GAS
C115	87-010-196-080		CHIP CAPACITOR,0.1-25	C351	87-010-498-040		CAP, E 10-16 GAS
C116	87-010-178-080		CHIP CAP 1000P	C352	87-010-498-040		CAP, E 10-16 GAS
C117	87-010-085-080		CHIP CAP 3900P	C353	87-010-498-040		CAP, E 10-16 GAS
C119	87-010-196-080		CHIP CAPACITOR,0.1-25	C354	87-010-498-040		CAP, E 10-16 GAS
C121	87-010-213-080		C-CAP,S 0.015-50 B	C355	87-010-491-040		CAP, E 0.22-50 GAS
C122	87-010-213-080		C-CAP,S 0.015-50 B	C356	87-010-491-040		CAP, E 0.22-50 GAS
C123	87-010-197-080		CAP, CHIP 0.01 DM	C365	87-010-178-080		CHIP CAP 1000P
C124	87-010-196-080		CHIP CAPACITOR,0.1-25	C366	87-010-178-080		CHIP CAP 1000P
C125	87-010-178-080		CHIP CAP 1000P	C367	87-010-178-080		CHIP CAP 1000P
C126	87-010-178-080		CHIP CAP 1000P	C368	87-010-178-080		CHIP CAP 1000P
				C381	87-010-196-080		CHIP CAPACITOR,0.1-25

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C401	87-010-494-040	CAP, E 1-50 GAS		CNA251	8Z-KT1-634-010	CONN ASSY,10P DECK-1	
C402	87-010-494-040	CAP, E 1-50 GAS		CNA252	8Z-KT1-635-010	CONN ASSY,5P DECK-2	
C451	87-010-805-080	CAP, S 1-16		CNA852	8Z-KT1-645-010	CONN ASSY,11P DFP-2	
C452	87-010-805-080	CAP, S 1-16		CNA853	8Z-KT1-644-010	CONN ASSY,6P DFP-1	
C453	87-010-805-080	CAP, S 1-16		CNA881	8Z-KT1-620-010	CONN ASSY,8P ISO-BLACK	
C454	87-010-805-080	CAP, S 1-16		CNA881	8Z-KT1-621-010	CONN ASSY,8P ISO-WHITE	
C455	87-012-140-080	CAP 470P		D702	87-027-262-010	LEDE, TLR-124(RED)	
C456	87-012-140-080	CAP 470P		J101	8Z-KT1-614-010	ANT, AW-002	
C457	87-012-140-080	CAP 470P		J401	8Z-KT1-618-010	JACK, DIN 13 P TCS5116	
C458	87-012-140-080	CAP 470P		J451	88-KTA-604-010	JACK, PIN 4P V-TYPE	
C481	87-010-805-080	CAP, S 1-16		L101	87-003-143-080	COIL 4.7 UH	
C482	87-010-805-080	CAP, S 1-16		L102	8Z-KT1-619-010	COIL,68MH K7-D	
C483	87-010-805-080	CAP, S 1-16		L151	87-003-147-080	COIL, 22UH	
C484	87-010-805-080	CAP, S 1-16		L631	87-003-149-080	COIL,47UH	
C501	87-010-322-080	C-CAP,S 100P-50 CH		L881	8Z-KT1-615-010	FLTR,AMORPHOUS -CHOKE	
C502	87-010-322-080	C-CAP,S 100P-50 CH		MIC801	8Z-KT1-643-090	MIC, EMC KUC2123-040245DB	
C503	87-010-322-080	C-CAP,S 100P-50 CH		PL701	8Z-KT1-641-010	LAMP,T-3	
C504	87-010-322-080	C-CAP,S 100P-50 CH		R605	88-148-102-080	C-RES, 1K-1/2W J	
C505	87-010-322-080	C-CAP,S 100P-50 CH		SFR101	87-024-437-080	SFR100K,RH063EC	
C506	87-010-322-080	C-CAP,S 100P-50 CH		SFR201	87-024-433-080	SFR,10K RH063EC	
C507	87-010-322-080	C-CAP,S 100P-50 CH		SFR202	87-024-433-080	SFR,10K RH063EC	
C508	87-010-322-080	C-CAP,S 100P-50 CH		SW701	87-A91-155-010	SW,TACT SKHHHQ	
C511	8Z-KT1-633-090	CAP,E 3300U-16 PW		SW703	87-036-109-010	PUSH SWITCH	
C512	87-010-196-080	CHIP CAPACITOR,0.1-25		TU101	8Z-KT1-631-010	TU UNIT, FAE347-A02	
C513	87-010-498-040	CAP,E 10-16 GAS		X151	87-A70-091-010	VIB,XTAL 4.332MHZ CSA-309	
C515	87-010-182-080	C-CAP,S 2200P-50 B		X701	87-A70-175-010	VIB,XTAL 4.5MHZ AT-49	
C516	87-010-196-080	C-CAP,S 0.47		FRONT C.B			
C551	87-010-494-040	CAP,E 1-50 GAS		C901	87-010-196-080	CHIP CAPACITOR,0.1-25	
C590	87-012-349-080	C-CAP,S 1000P-50 CH		C902	87-010-196-080	CHIP CAPACITOR,0.1-25	
C601	87-010-935-040	CAP,E 220-16 M VR		C903	87-010-805-080	CAP, S 1-16	
C611	87-010-198-080	CAP, CHIP 0.022		C904	87-010-805-080	CAP, S 1-16	
C612	87-016-459-040	CAP,E 470-10 SMG		C905	87-010-322-080	C-CAP,S 100P-50 CH	
C621	87-010-198-080	CAP, CHIP 0.022		C906	87-010-322-080	C-CAP,S 100P-50 CH	
C622	87-010-555-040	CAP,E 100-10 GAS		C907	87-010-322-080	C-CAP,S 100P-50 CH	
C631	87-010-198-080	CAP, CHIP 0.022		C908	87-010-322-080	C-CAP,S 100P-50 CH	
C632	87-016-039-090	CAP,DL 0.022F-5.5 Z 70 FM		C909	87-010-322-080	C-CAP,S 100P-50 CH	
C633	87-010-198-080	CAP, CHIP 0.022		CON901	8Z-KT1-612-010	CONN,16P CAM-C73	
C634	87-010-198-080	CAP, CHIP 0.022		D921	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C635	87-010-553-040	CAP,E 47-16 GAS		D922	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C641	87-010-196-080	CHIP CAPACITOR,0.1-25		D923	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C642	87-010-196-080	CHIP CAPACITOR,0.1-25		D924	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C651	87-A11-177-080	C-CAP,S 0.15-16 K B		D925	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C652	87-A11-177-080	C-CAP,S 0.15-16 K B		D926	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C653	87-016-459-040	CAP,E 470-10 SMG		D927	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C661	87-010-198-080	CAP, CHIP 0.022		D928	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C662	87-010-553-040	CAP,E 47-16 GAS		D929	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C701	87-010-314-080	C-CAP,S 22P-50V		D930	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C702	87-010-315-080	C-CAP,S 27P-50 CH		D931	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C703	87-010-196-080	CHIP CAPACITOR,0.1-25		D932	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C704	87-010-196-080	CHIP CAPACITOR,0.1-25		D933	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C705	87-010-490-040	CAP, ELECT 0.1-50		D934	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C706	87-010-178-080	CHIP CAP 1000P		D935	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C707	87-010-178-080	CHIP CAP 1000P		D936	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C751	87-010-178-080	CHIP CAP 1000P		D937	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C752	87-010-322-080	C-CAP,S 100P-50 CH		D938	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C753	87-010-322-080	C-CAP,S 100P-50 CH		D939	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C754	87-010-197-080	CAP, CHIP 0.01 DM		D940	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C801	87-010-553-040	CAP,E 47-16 GAS		D941	87-A40-621-040	C-LED,SEC2484C GR/AMB	
C802	87-010-555-040	CAP,E 100-10 GAS		L901	87-005-902-080	C-COIL,S 4.7UH K LK2125	
C803	87-010-497-040	CAP,E 4.7-35 GAS		L902	87-005-902-080	C-COIL,S 4.7UH K LK2125	
C804	87-010-495-040	CAP,E 2.2-50 GAS		L903	87-005-902-080	C-COIL,S 4.7UH K LK2125	
C805	87-010-194-080	CAP, CHIP 0.047		LCD901	8Z-KT1-607-010	LCD,ZKT-1	
C806	87-010-497-040	CAP,E 4.7-35 GAS		PL901	8Z-KT1-651-010	LAMP,9V-85MA	
C807	87-010-555-040	CAP,E 100-10 GAS		PL902	8Z-KT1-651-010	LAMP,9V-85MA	
C861	87-010-494-040	CAP,E 1-50 GAS		SW901	87-A90-001-080	C-SW,TACT SKQMAL	
C862	87-010-494-040	CAP,E 1-50 GAS		SW902	87-A90-001-080	C-SW,TACT SKQMAL	
C881	87-010-196-080	CHIP CAPACITOR,0.1-25		SW903	87-A90-001-080	C-SW,TACT SKQMAL	
C882	87-010-182-080	C-CAP,S 2200P-50 B					
C883	87-010-182-080	C-CAP,S 2200P-50 B					
C884	87-010-182-080	C-CAP,S 2200P-50 B					

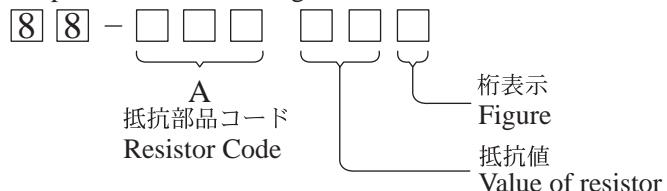
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
SW904	87-A90-001-080		C-SW,TACT SKQMAL				JACK C.B
SW905	87-A90-001-080		C-SW,TACT SKQMAL				
SW906	87-A91-159-010		SW,TACT SKHLAD				J901 87-A60-249-010 JACK,MOJ-B32
SW907	87-A90-001-080		C-SW,TACT SKQMAL				
SW908	87-A90-001-080		C-SW,TACT SKQMAL				
SW909	87-A90-001-080		C-SW,TACT SKQMAL				REEL C.B
SW910	87-A91-159-010		SW,TACT SKHLAD				M1 S1-003-670-570 MOTOR, SUB
SW911	87-A90-001-080		C-SW,TACT SKQMAL				SW1 S1-052-270-100 SW,LEAF (MSL-2)
SW912	87-A90-001-080		C-SW,TACT SKQMAL				SW2 S1-052-270-110 SW,LEAF (MLS-4)
SW913	87-A91-159-010		SW,TACT SKHLAD				
SW914	87-A90-001-080		C-SW,TACT SKQMAL				HEAD C.B
SW915	87-A90-001-080		C-SW,TACT SKQMAL				
SW916	87-A90-001-080		C-SW,TACT SKQMAL				M2 S1-052-270-180 MOTOR, SUB
SW917	87-A90-001-080		C-SW,TACT SKQMAL				PH1 SX-005-270-400 PHOTO COUPLER ASSY
SW918	87-A90-001-080		C-SW,TACT SKQMAL				SW3 S1-005-670-110 SW,SW-112
SW919	87-A91-159-010		SW,TACT SKHLAD				SW4 S1-003-670-071 SW,SLIDE (SLD-32-710S)
SW920	87-A90-001-080		C-SW,TACT SKQMAL				
SW921	87-A91-159-010		SW,TACT SKHLAD				
SW931	87-036-127-010		SLIDE SWITCH				

SUB C.B

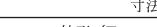
CON851	8Z-KT1-613-010	CONN,16P CAM-C74
CON853	87-009-411-010	CONN,6P ZH V
SW702	87-036-220-080	C-SW,T

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

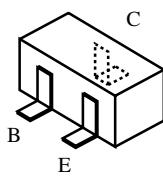
チップ抵抗部品コードの成り立ち Chip Resistor Part Coding



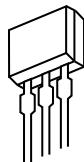
チップ抵抗 Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)			抵抗コード Resistor Code : A	
				外形/Form	L	W		
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

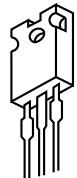
TRANSISTOR ILLUSTRATION



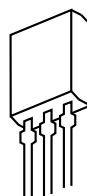
2SA1037AK (R)
2SC2412K(R)
DTA114YKA
DTA114TKA
DTB123YK
DTC114TKA
DTC114YKA
DTC363TK



KTA1658(Y)
KTC4369(Y)



KTC 2804(Y)



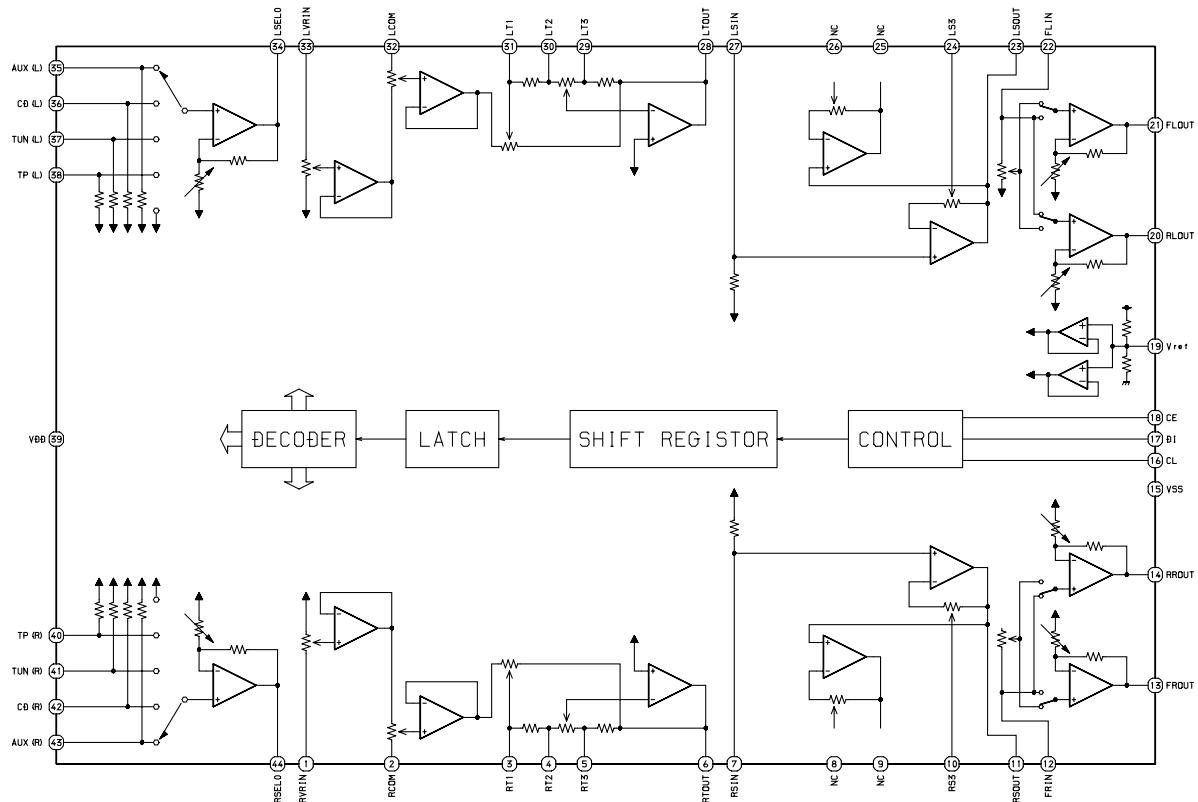
KTC3205(Y)



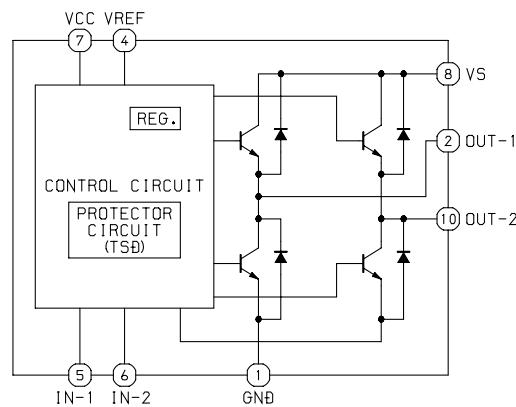
KRA226M

IC BLOCK DIAGRAM

IC, LC75374E



IC, TA7291P

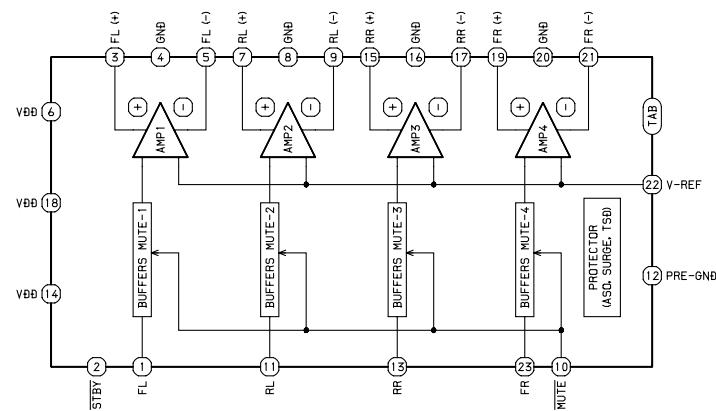


TRUTH TABLE

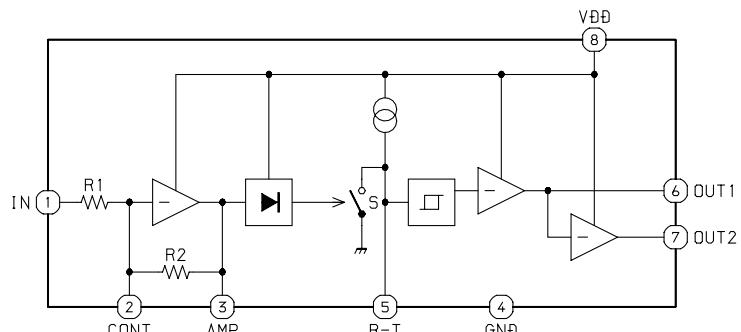
INPUT	OUTPUT	MODE			
		IN1	IN2	OUT1	OUT2
0	0	∞	∞	∞	∞
1	0	H		L	
0	1		L	H	
1	1	L		L	

∞ : HIGH IMPEDANCE
INPUT IS "H" ACTIVE

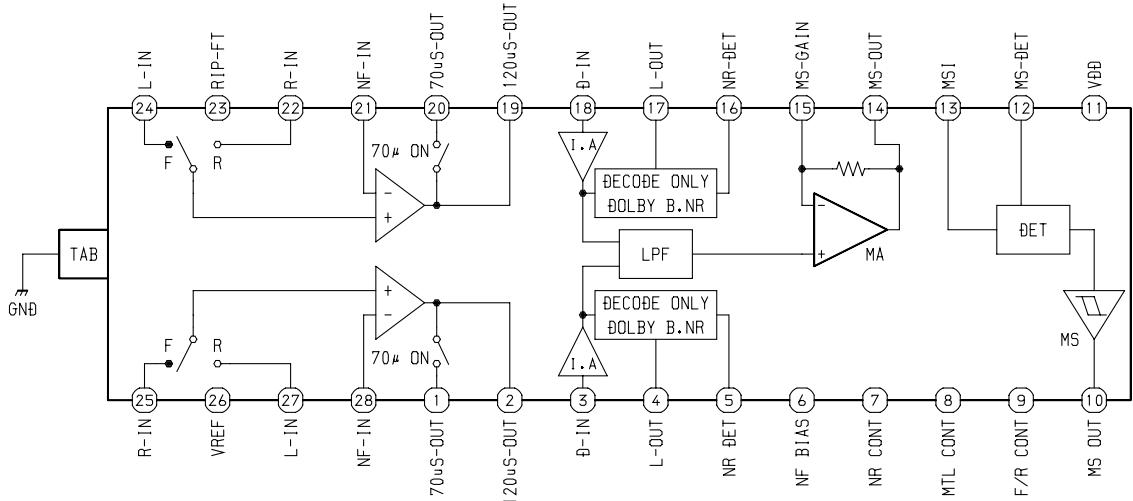
IC, HA13158



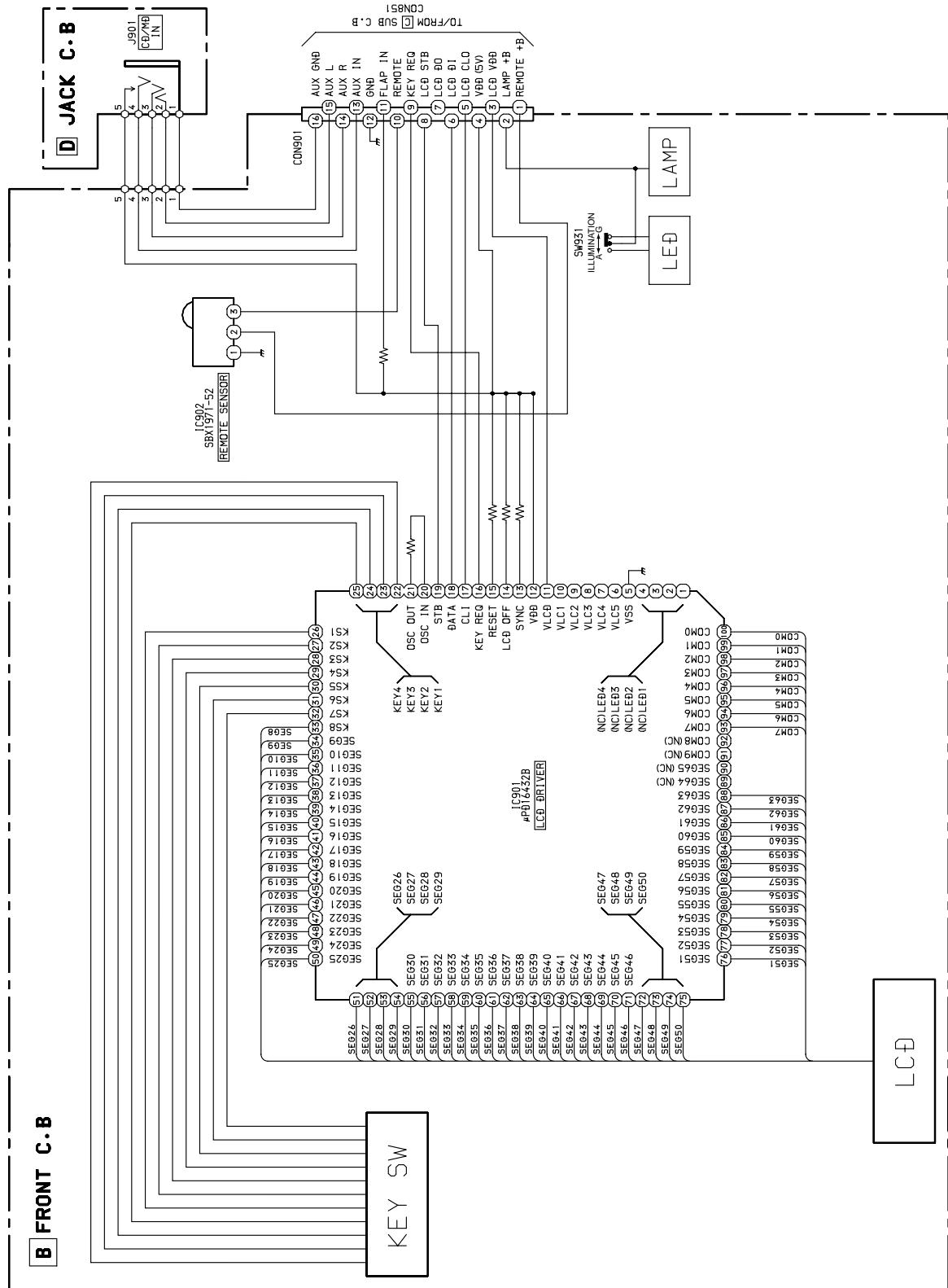
IC, NJM2072M



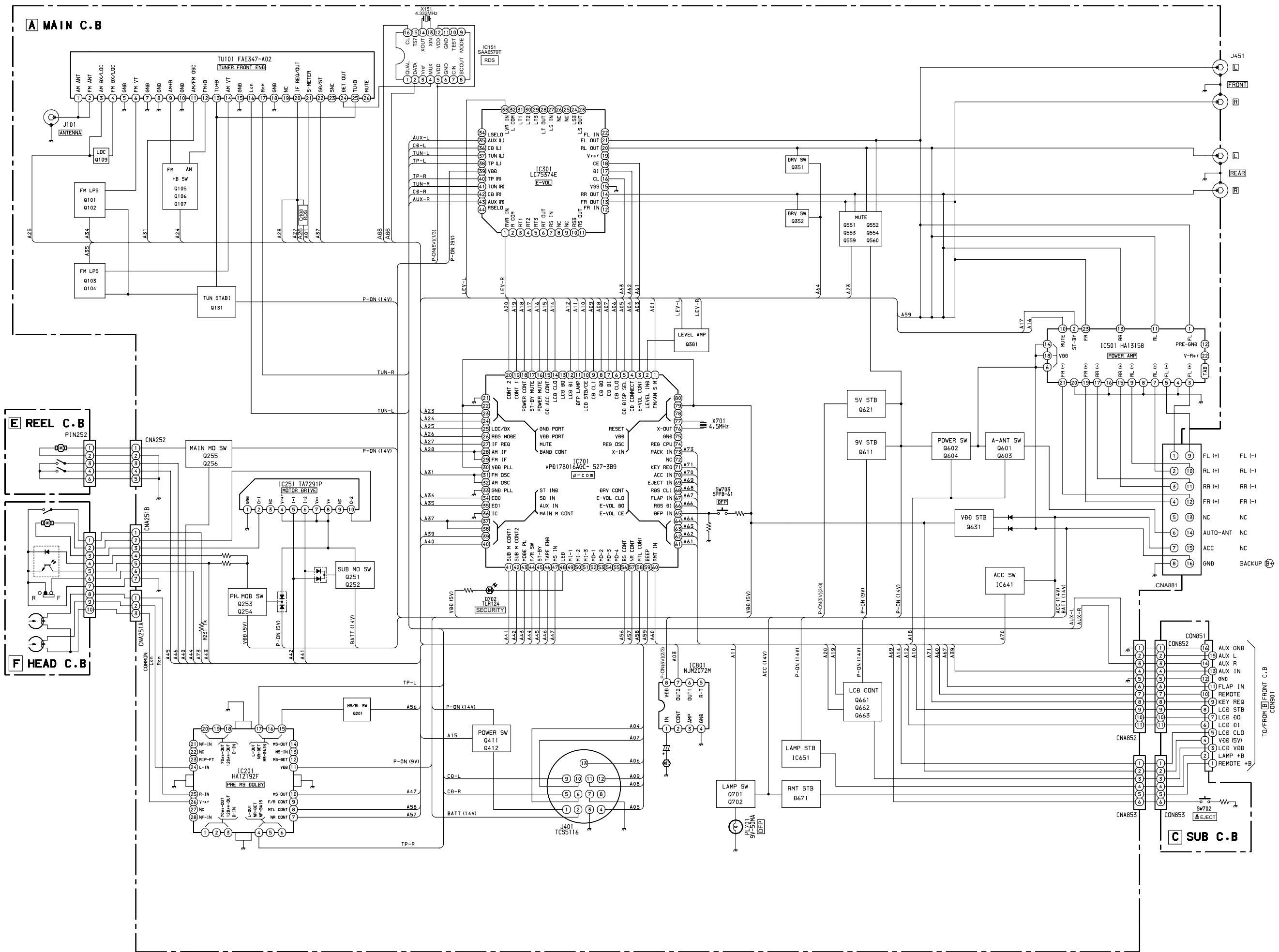
IC, HA12192F



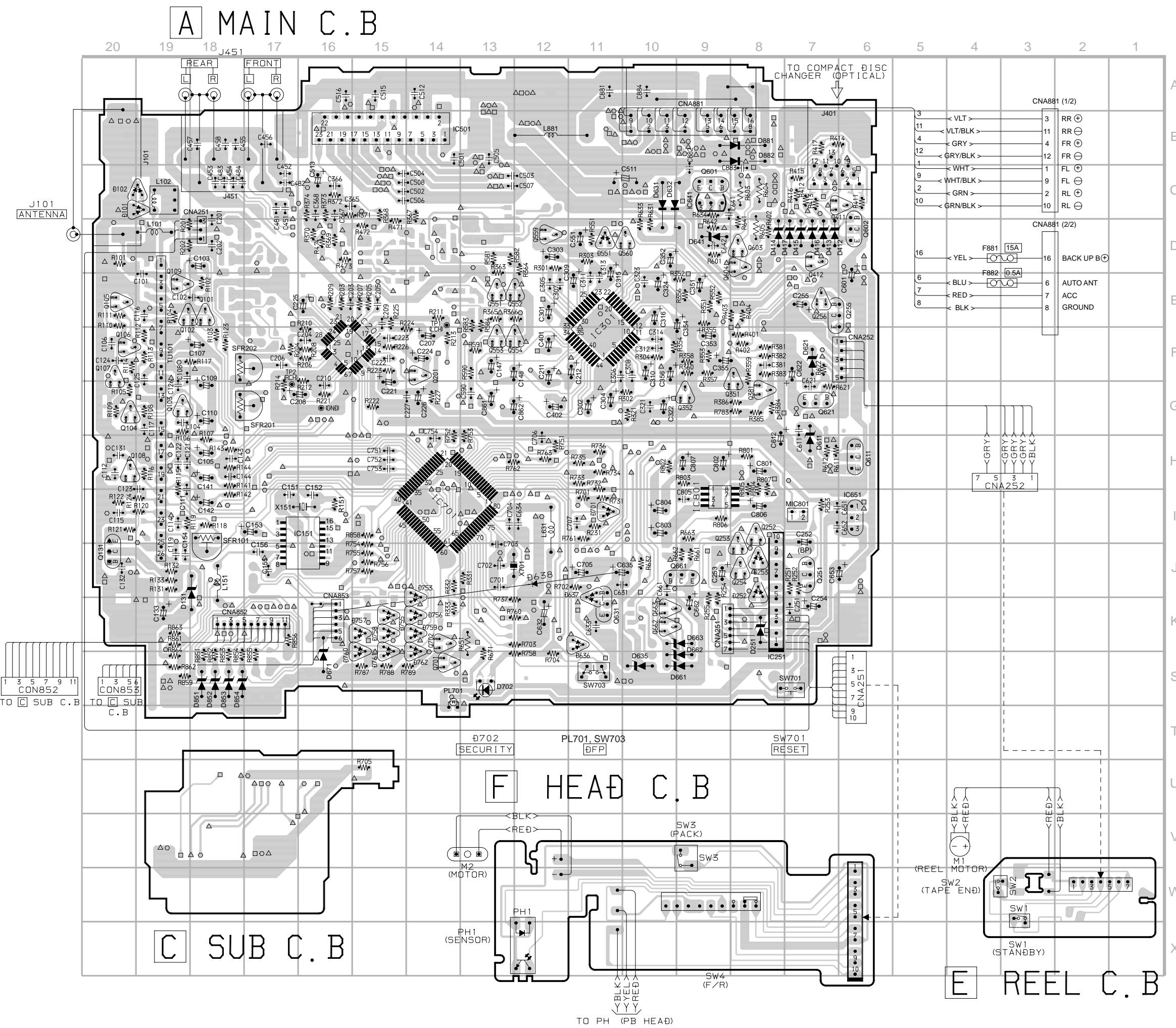
BLOCK DIAGRAM-1 (FRONT C.B SECTION)



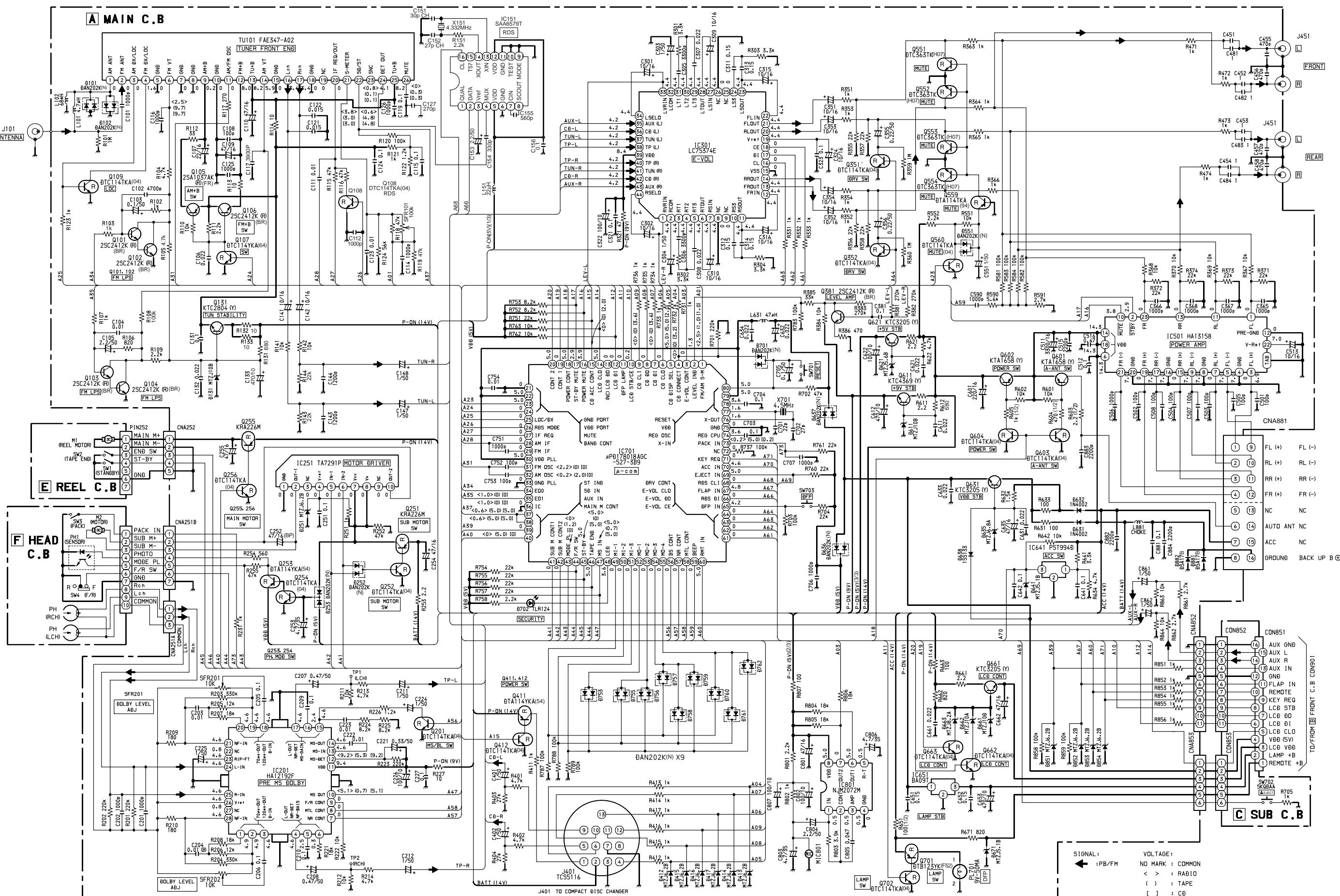
BLOCK DIAGRAM-2 (MAIN SECTION)



WIRING-1 (MAIN C.B-CHIP PARTS SIDE)



SCHEMATIC DIAGRAM-1 (MAIN SECTION)

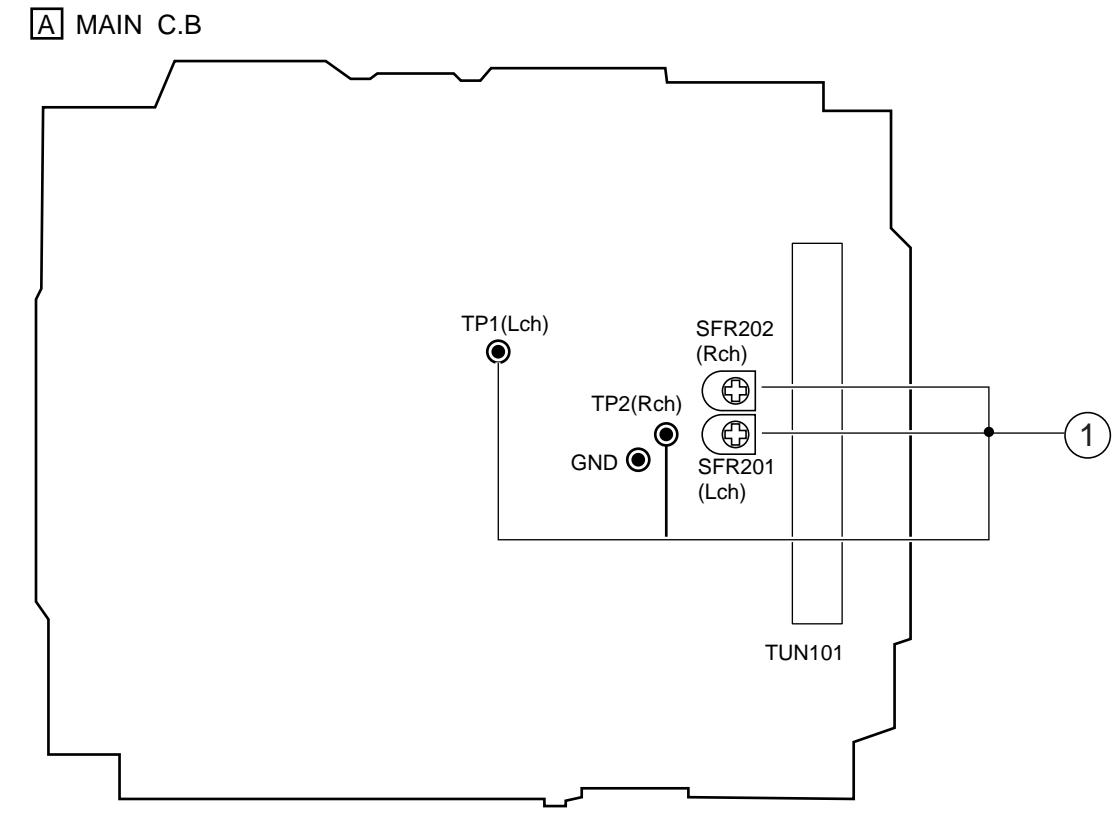


IC DESCRIPTION

IC, UPD16432B

Pin No.	Pin Name	I/O	Description
1 ~ 4	LED1~4	O	LED output, Nch open-drain.
5	VSS	-	GND.
6 ~ 10	VCL5 ~1	-	Dot matrix LCD driver power supply.
11	VLCD	-	LCD driver power supply.
12	VCC	-	Internal logic power supply.
13	SYNC	I/O	Input/output singal synchronization.
14	<u>LCD OFF</u>	I	When "L", a forced LCD OFF operation is performed, and SIGn & COMn output the unselected waveform.
15	<u>RESET</u>	-	Initial state is set when "L".
16	KEYREQ	O	"H" if there is KEY data, "L" if there is none. KEY data can be read in respective of the state of this pin, CMOS output.
17	CLI	I	DATA shift clock. DATA is read on rising edge, and output on falling edge.
18	DATA	I/O	Performs input of commands, key data etc., and key data output. Input is performed from the MSB on the rise of the shift clock, and the first 8 bits are recognized as a command. Output is perform from the MSB on the fall of the shift clock. Output is Nch open-drain.
19	STB	I	Strobe input, DATA input is unable when "H". Command processing performed on a fall.
20, 21	OSCIN,OSCOUT	I/O	Oscillation circuit.
22 ~ 25	KEY1~4	I	KEY scanning key data input.
26 ~ 33	KS1~6	O	KEYscanning key source output.
34 ~ 90	SEG9~65	O	Dot matrix LCD segment output.
91 ~ 100	COM9~O	O	Dot matrix LCD common output.

ELECTRICAL ADJUSTMENT



1. Dolby NR Adjustment

Settings : • Test tape : TTA-200

• Test points : TP1(Lch), TP2(Rch)

• Adjustment location : SFR201(Lch), SFR202(Rch)

Method : 1. Play a Dolby NR tape and adjust SFR201 and SFR202 so that the Lch (TP1) and Rch (TP2) levels are $300 \pm 5\text{mV}$.

2. Adjust the level in the forward running direction, and then check in the reverse direction. If the level drifts from the specification, perform readjustment.

PRACTICAL SERVICE FIGURE

< TUNER SECTION >

< FM SECTION >

IHF Sensitivity:
(S/N 30dB)
Signal to noise ratio:

Less than 10 dB μ V

[at 87.5/98.0/108.0 MHz]

More than 57 dB (mono)

More than 57 dB (stereo)

[at 87.5/98.0/108.0 MHz]

Distortion:

Less than 1.5% (mono)

Less than 2.0% (stereo)

[at 98.0 MHz]

Stereo separation:

More than 22 dB

[at 98.0 MHz]

IF Frequency:

10.7 MHz

< MW SECTION >

Sensitivity:
(S/N 20 dB)
Signal to noise ratio:
(INPUT 74 dB)

Less than 35 dB μ V

[at 603/999/1404 kHz]

More than 42 dB

[at 603/999/1404 kHz]

Distortion:

Less than 1.5%

[at 999 kHz]

IF Frequency:

450 kHz

< LW SECTION >

Sensitivity:
(S/N 20 dB)
Signal to noise ratio:
(INPUT 74 dB)

Less than 40 dB μ V

[at 162/216/270 kHz]

More than 37 dB

[at 162/216/270 kHz]

Less than 1.5%

[at 216 kHz]

< DECK SECTION >

Tape speed:
Wow & flutter:
Max Output level:
Distortion (PB):
Noise level:
Signal to noise ratio:

2955 ~ 3090Hz (TTA-100)

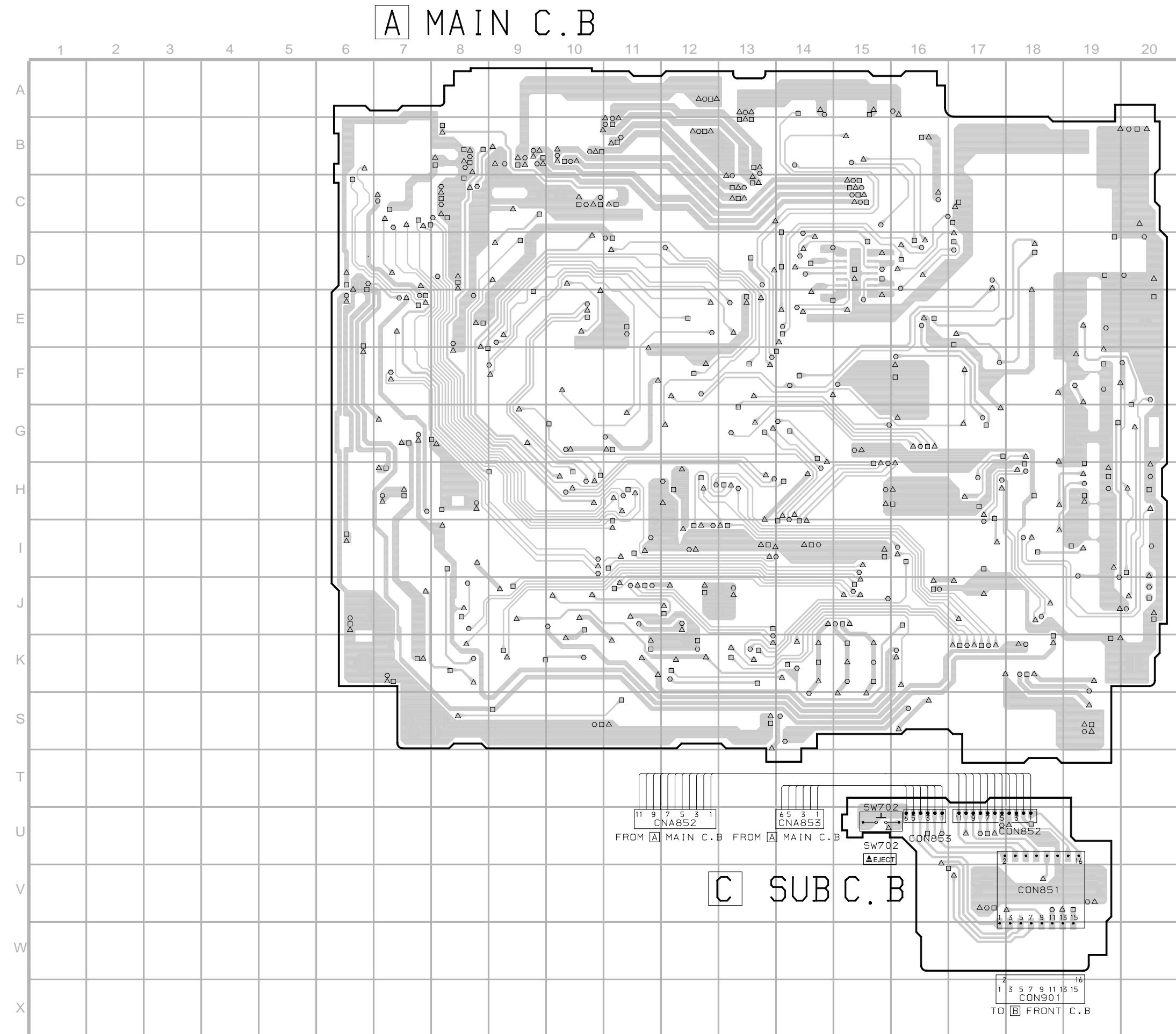
Less than 0.35% (R.M.S)

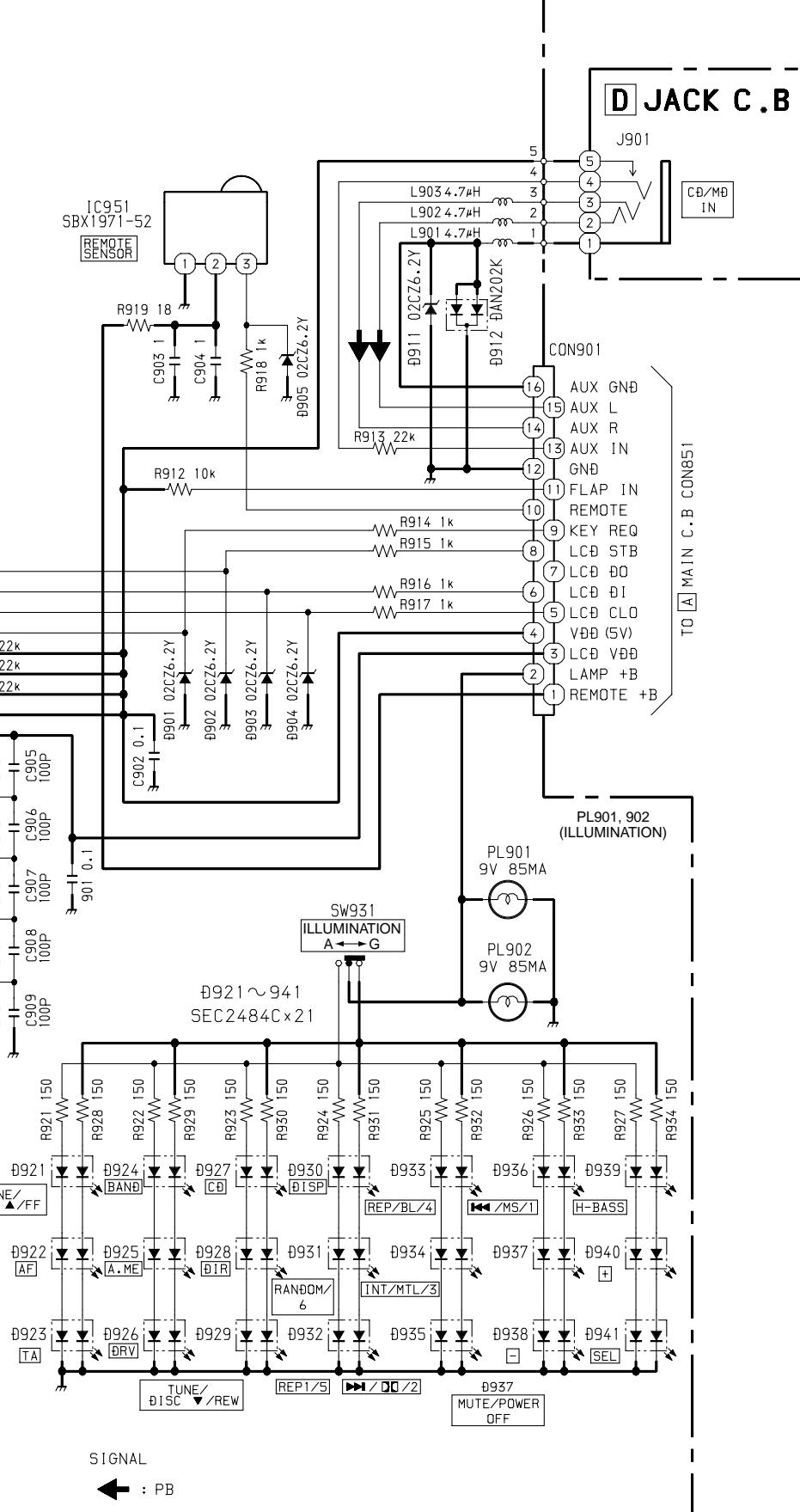
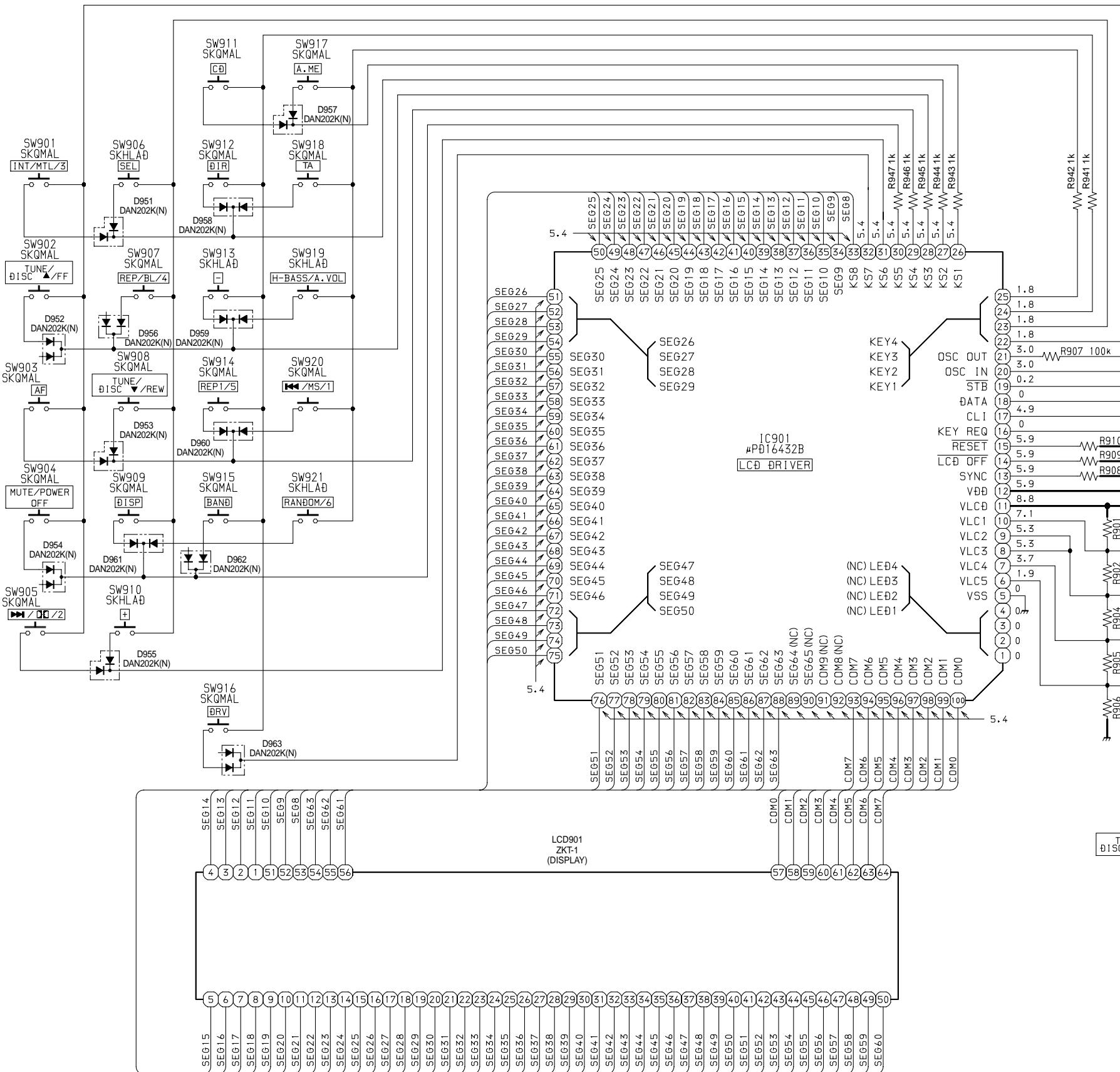
more than 9 V (TTA-210)

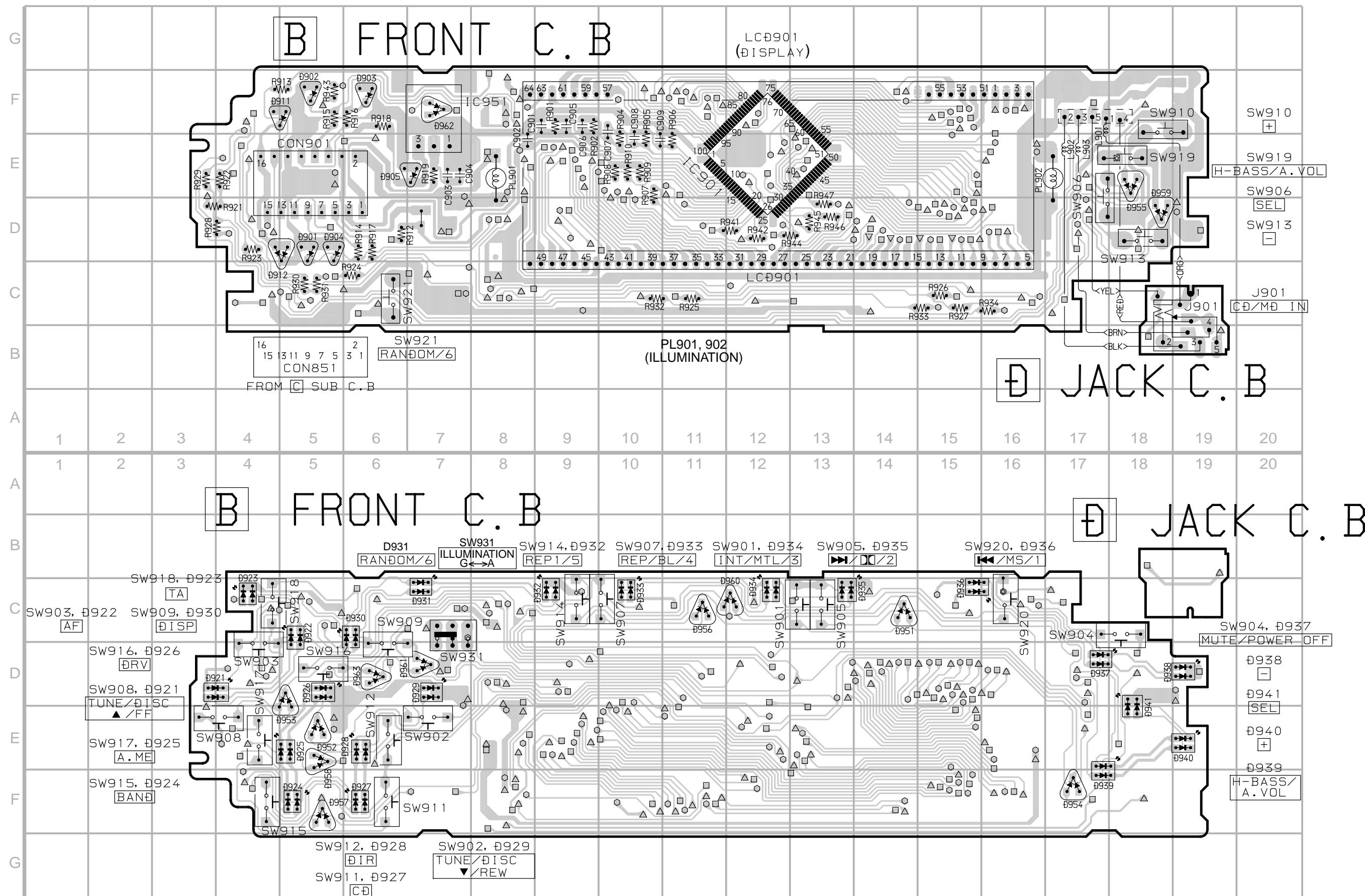
Less than 2.0% (TTA-210)

Less than 100 mV (at 120 μ s, Vol Max)

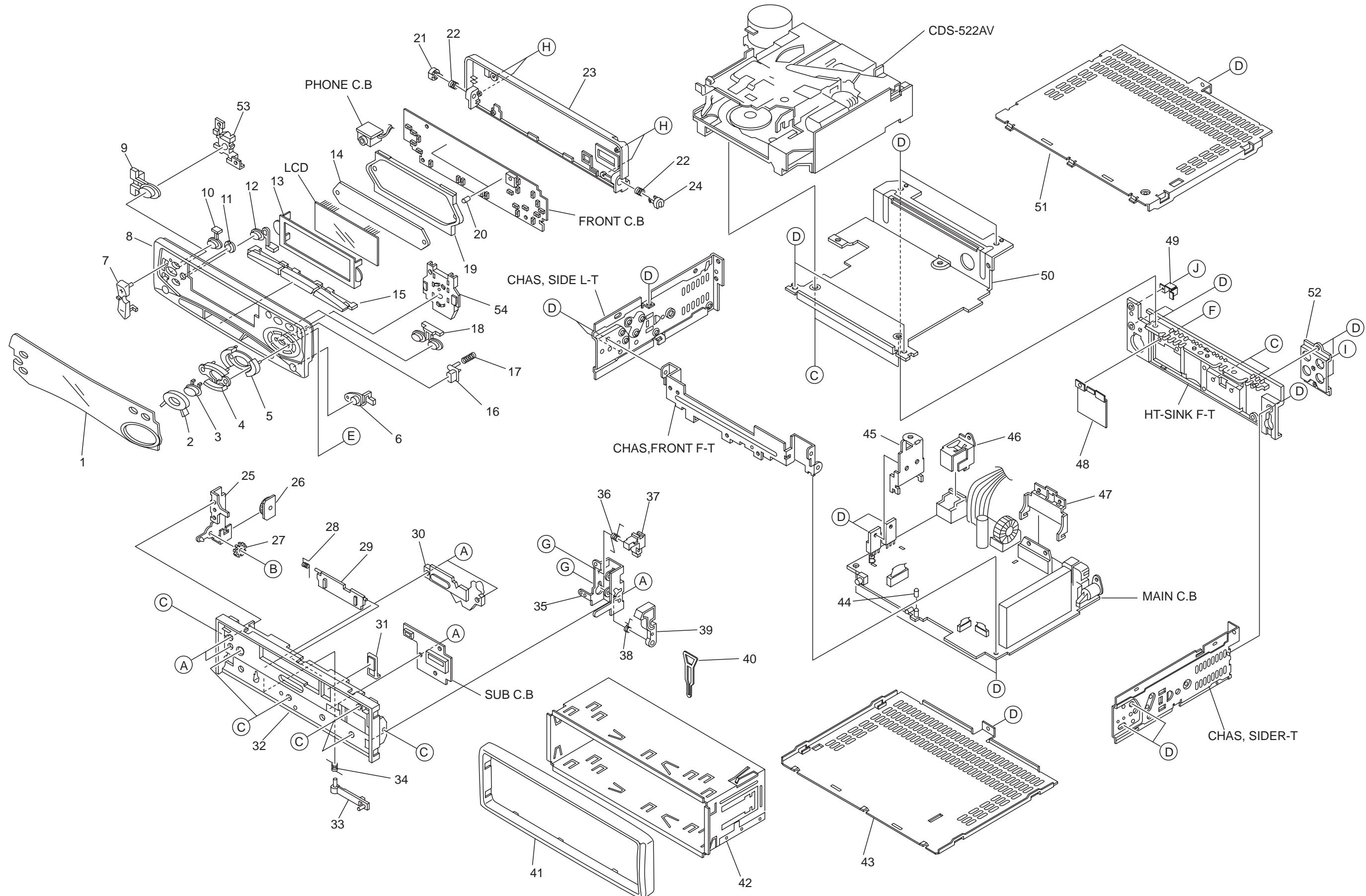
More than 48 dB



B FRONT C.B



MECHANICAL EXPLODED VIEW 1/1



MECHANICAL MAIN PARTS LIST

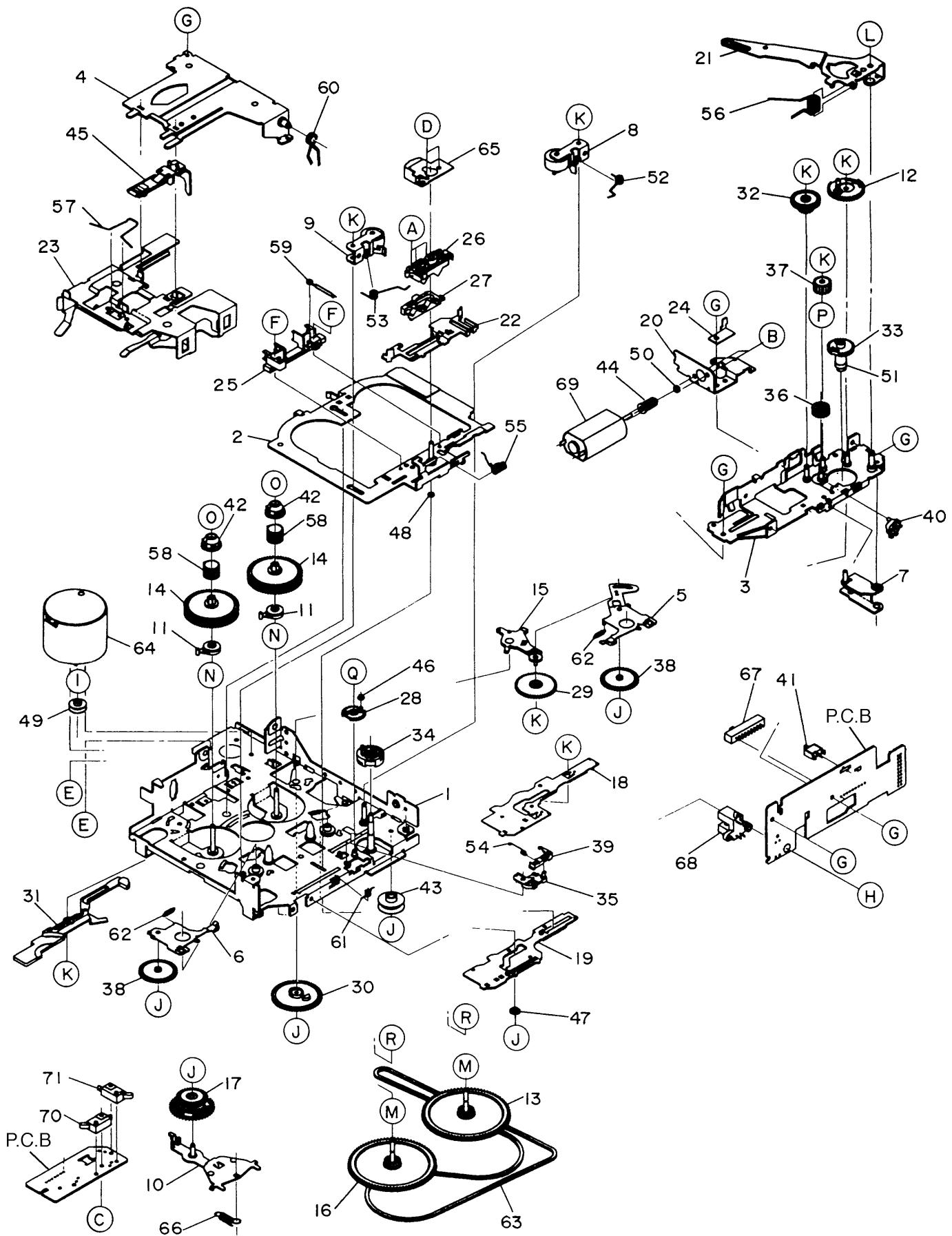
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-KT1-003-010		WINDOW, LCD F-T	36	8Z-KT1-260-010		SPR-T, F. LOCK-T
2	8Z-KT1-017-010		RING, OVAL -T	37	8Z-KT1-201-010		ARM, F-LOCK -T
3	8Z-KT1-012-010		BTN, DRV -T	38	8Z-KT1-243-010		SPR-T, FLAP -T
4	8Z-KT1-014-010		BTN, TETRA -T	39	8Z-KT1-202-010		LEVER, F-OPEN -T
5	8Z-KT1-011-010		BTN, U/D -T	40	8Z-KT1-232-010		KEY, REMOVE-T
6	8Z-KT1-015-010		BTN, TA -T	41	8Z-KT1-022-010		CABI, TRIM F-T
7	8Z-KT1-007-010		BTN, +/- -T	42	8Z-KT1-231-010		HLDR, HALF-T
8	8Z-KT1-001-010		CABI, FRONT F-T	43	8Z-KT1-212-010		COVER, BOTTOM -T
9	8Z-KT1-008-010		BTN, SEL -T	44	8Z-KT1-237-010		CAP, LAMP GRN
10	8Z-KT1-010-010		BTN, H-BASS -T	45	8Z-KT1-219-010		HLDR, TR -T
11	8Z-KT1-209-010		LENS, IR -T	46	8Z-KT1-218-010		HLDR, CD -T
12	8Z-KT1-009-010		BTN, MUTE -T	47	8Z-KT1-215-010		HLDR, P-IC -T
13	8Z-KT1-225-010		HLDR, LCD F -T	48	8Z-KT1-235-010		COVER, CONN.BLIND -T
14	8Z-KT1-207-010		LENS, LCD F -T	49	8Z-KT1-257-010		HLDR, ISO-WIRE -T
15	8Z-KT1-006-010		BTN, P.SET -T	50	8Z-KT1-216-010		HLDR, DECK CDS522
16	8Z-KT1-016-010		BTN, OPEN F -T	51	8Z-KT1-211-010		COVER, TOP -T
17	8Z-KT1-242-010		SPR-C, OPEN BTN F -T	52	8Z-KT1-220-010		HLDR, JACK F -T
18	8Z-KT1-013-010		BTN, TWIN -T	53	8Z-KTA-213-010		LENS, L -T10
19	8Z-KT1-206-010		CASE, LCD LENS F -T	54	8Z-KTA-214-010		LENS, R -T10
20	8Z-KT1-239-010		CAP, LAMP BLU B	A	8Z-KT1-254-010		S-SCREW, PT 2*5 BH+ BLK
21	8Z-KT1-204-010		HLDR, F-HOOK L -T	B	8Z-KT1-247-010		S-SCREW, GEAR2.0-1.8 -4.2
22	8Z-KT1-241-010		SPR-C, DFP HOOK F -T	C	88-KT1-250-010		S-SCREW, THIN HEAD+2.6-4 BLK
23	8Z-KT1-002-010		CABI, REAR F-T	D	87-251-073-410		SCREW, U+2.6-6
24	8Z-KT1-205-010		HLDR, F-HOOK R -T	E	87-253-034-410		U+2-5 BLK
25	8Z-KT1-229-010		HLDR, DAMPER F ASS'Y-T	F	87-251-096-410		U+3-10
26	8Z-KT1-250-010		OIL-DMPR, 100	G	8Z-KT1-246-010		S-SCREW, 2.0-2.5 -10
27	8Z-KT1-203-010		GEAR, FLAP -T	H	8Z-KT1-253-010		S-SCREW, PT 2*8 BH+ BLK
28	8Z-KT1-244-010		SPR-T, DOOR Z	I	87-251-075-410		U+2.6-10
29	8Z-KT1-023-010		DOOR, CASS	J	87-B10-210-010		UT2+3.0-6.0 W/0 SLOT (BH TAP)
30	8Z-KT1-208-010		LENS, BASE -T				
31	8Z-KT1-018-010		BTN, EJ F-T				
32	8Z-KT1-021-010		CABI, BASE F-T				
33	8Z-KT1-222-010		ARM, SENSOR F -T				
34	8Z-KT1-248-010		SPR-T, SENSOR F -T				
35	8Z-KT1-230-010		HLDR, DFP ASS'Y-T				

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

TAPE MECHANISM EXPLODED VIEW 1/1



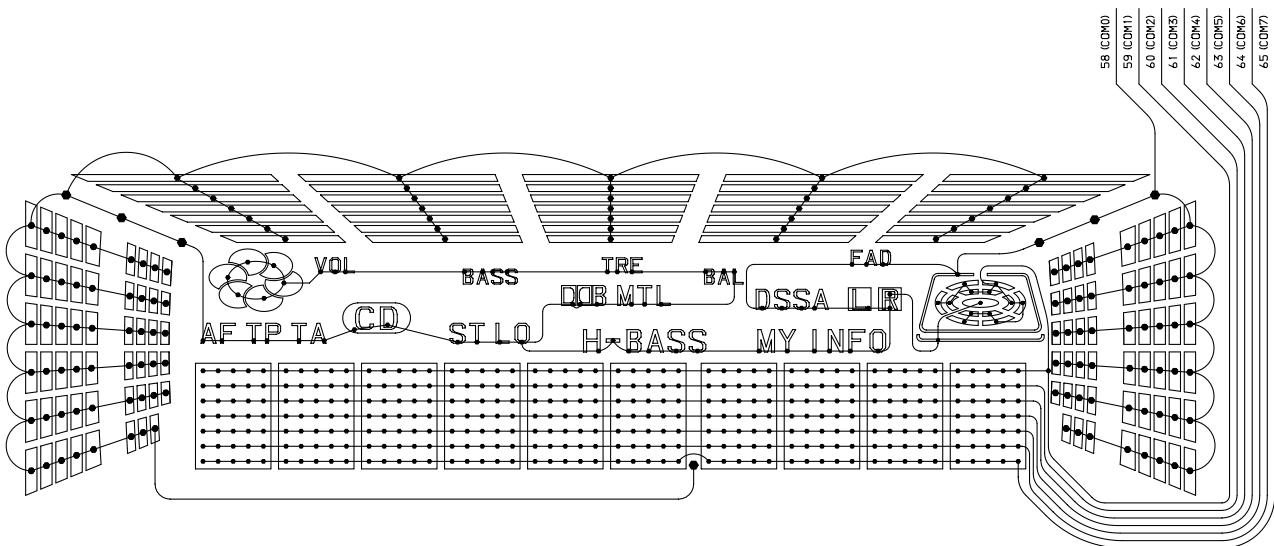
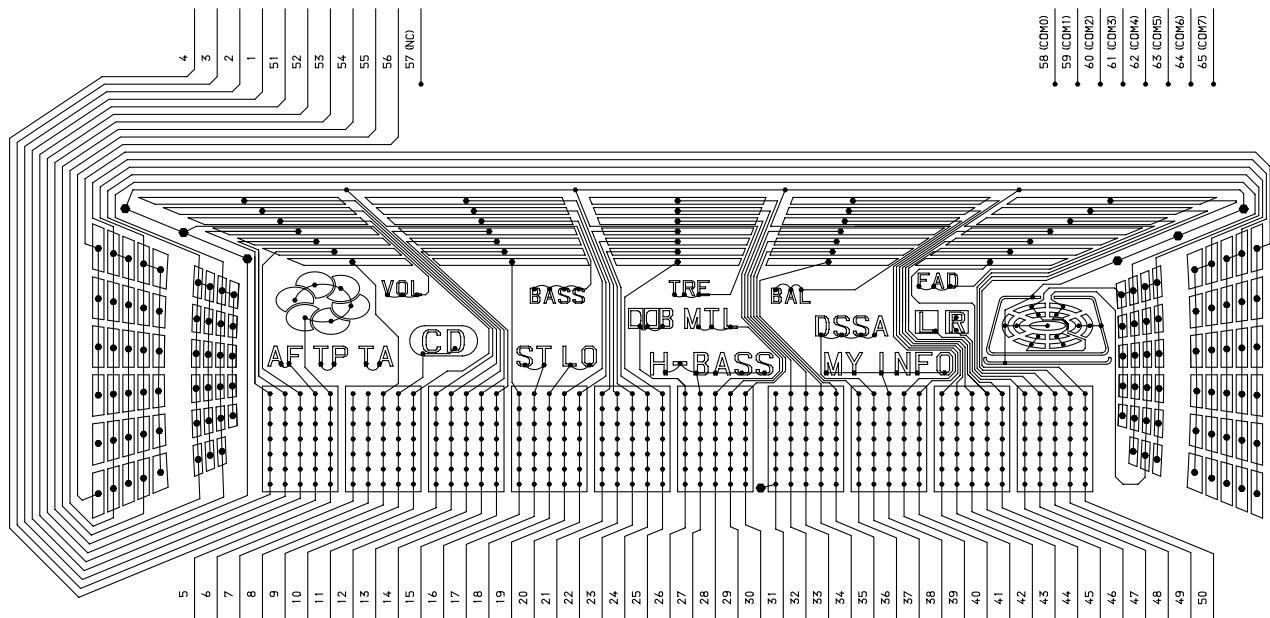
TAPE MECHANISM PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S1-052-260-010		CHASSIS ASSY	46	S1-052-230-050		SELECT GEAR COLLAR
2	S1-052-260-020		HADE PLATE ASSY	47	S1-005-230-280		HEAD BASE ROLLER(L)
3	S1-052-260-030		SUB CHASSIS ASSY	48	S1-005-230-290		HEAD BASE ROLLER(S)
4	SX-052-210-040		HOLDER ARM ASSY	49	S1-005-230-380		MOTOR PULLEY(DL)
5	SX-052-210-060		T.U ARM(F)ASSY	50	S0-052-230-260		WORM COLLAR
6	SX-052-210-070		T.U ARM(R)ASSY	51	S0-052-230-270		MODE GEAR COLLAR
7	SX-052-210-100		SET ARM ASSY	52	S1-052-240-010		PINCH ARM(F)SPG
8	SX-052-210-190		PINCH ARM(F)ASSY	53	S1-052-240-020		PINCH ARM(R)SPG
9	SX-052-210-200		PINCH ARM(R)ASSY	54	S1-052-240-030		GEAR LATCH SPG
10	SX-052-210-220		F.R ARM ASSY	55	S1-052-240-040		HEAD SPG
11	SX-052-220-080		DETECT ARM ASSY	56	S1-052-240-060		LOAD ARM SPG
12	SX-052-220-100		LOAD GEAR ASSY	57	S1-052-240-080		CATCH SPG
13	SX-052-220-160		FLYWHEEL(F)ASSY	58	S1-052-240-100		REEL DRIVER SPG
14	SX-052-220-180		REEL TABLE ASSY	59	S1-052-240-110		DASH SPG
15	SX-052-220-200		REDUCTION GEAR ARM ASSY	60	S1-052-240-140		HOLDER ARM SPG
16	SX-052-220-210		FLYWHEEL(R)ASSY	61	S1-052-240-160		HOLD SPG
17	SX-005-220-010		FR GEAR ASSY	62	S1-052-240-170		TU ARM SPG
18	S1-052-210-080		PLATE,DIR	63	S1-005-250-220		BELT
19	S1-052-210-090		PLATE FF/REW	64	S1-003-670-570		MOTOR
20	S1-052-210-120		MOTOR BKT	65	S1-052-270-030		HEAD 2CH
21	S1-052-210-130		LOAD ARM	66	S1-052-240-150		FR ARM SPG
22	S1-052-210-140		SHIFT CAM LINK	67	S1-003-670-071		SW,SLIDE(SLD-32-710S)
23	S1-052-210-170		HOLDER CASS	68	SX-005-270-400		PHOTO COUPLER ASSY
24	S0-052-210-260		HOLDER WORM	69	S1-052-270-180		MOTOR, SUB
25	S1-052-220-010		GUIDE TAPE	70	S1-052-270-110		SW,LEAF(MLS-4)
26	S1-052-220-020		HEAD BKT	71	S1-052-270-100		SW,LEAF(MSL-2)
27	S1-052-220-030		CAM SHIFT HEAD	A	S1-052-250-030		SCREW,AZIMUTH
28	S1-052-220-040		GEAR SELECT	B	S1-005-250-230		SCREW,MOTOR M2-2.5
29	S1-052-220-050		GEAR REDUCTION	C	S1-010-150-060		SCREW,PLAIN M1.7-7
30	S1-052-220-060		GEAR DETECT	D	S1-052-250-050		SCREW,SPECIAL(2)
31	S1-052-220-070		DETECTOR	E	87-265-544-310		SCREW,PLAIN M2-2.2
32	S1-005-220-120		GEAR WORM	F	S1-052-250-060		SCREW,SPECIAL(3)
33	S1-052-220-110		GEAR MODE	G	87-267-443-010		SCREW,PLAIN M2-3
34	S1-052-220-120		GEAR MODE(2)	H	S2-138-200-50C		PLAIN B-TYPE M2-5
35	S1-052-220-130		GEAR LATCH	I	S1-001-250-170		WASHER MYLAR
36	S1-052-220-140		GEAR IDLE(1)	J	S2-181-200-30D		PSW-S 1.2-3.0-0.25
37	S0-052-220-150		GEAR IDLE(2)	K	S2-181-600-32D		PSW-S 1.6-3.2-0.25
38	S1-052-220-170		GEAR T.U	L	S2-181-600-325		PSW-S 1.6-3.2-0.5
39	S1-052-220-190		RACHET	M	S2-182-100-32D		PSW,2.1-3.2-0.25
40	S1-052-220-220		SW,ACTUATER	N	S2-182-100-40D		PSW,2.1-4.0-0.25
41	S1-005-670-110		SW,SW-112	O	S1-005-350-050		LMW-S,1.5-3.2-0.25
42	S1-005-220-040		REEL DRIVER	P	S2-182-100-403		PSW,2.1-4.0-0.3
43	S1-005-220-060		IDLE PULLEY	Q	S2-171-150-401		E-RING,1.5
44	S1-005-220-100		WORM	R	S2-171-160-329		E-RING 1.6-3.2-0.3
45	S1-005-220-320		CATCH(K)				

LCD DISPLAY

LCD, ZKT-1



サービス技術ニュース	
番号	連絡内容
G- -	
G- -	
G- -	

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